



Final Regulation Agency Background Document

Agency name	Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals (WWWOSSP)
Virginia Administrative Code (VAC) citation	18VAC160-20
Regulation title	Board for Waterworks and Wastewater Works Operators Regulations
Action title	General Regulation Review
Date this document prepared	July 2, 2009

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Orders 36 (2006) and 58 (1999), and the *Virginia Register Form, Style, and Procedure Manual*.

Brief summary

Please provide a brief summary (no more than 2 short paragraphs) of the proposed new regulation, proposed amendments to the existing regulation, or the regulation proposed to be repealed. Alert the reader to all substantive matters or changes. If applicable, generally describe the existing regulation. Also, please include a brief description of changes to the regulation from publication of the proposed regulation to the final regulation.

The proposed amendments change the language in specific sections of the regulations, reduce redundancy, and replace ambiguous language with more specific terms to eliminate confusion in determining various license entry and renewal requirements. The proposed changes will assist applicants and licensees to better understand the licensing requirements specific to each classification of licensure in waterworks and wastewater works. The language detailing experience exemption requirements is changed to be consistent throughout the regulations, the scope of the Board's disciplinary authority is clarified, continued professional education (CPE) becomes a renewal requirement for wastewater works operator licenses, and restricted Class VI waterworks licenses have been repealed.

Statement of final agency action

Please provide a statement of the final action taken by the agency including (1) the date the action was taken, (2) the name of the agency taking the action, and (3) the title of the regulation.

The Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals met on June 24, 2009, and adopted a final regulation entitled "Board for Waterworks and Wastewater Works Operators Regulations."

Legal basis

Please identify the state and/or federal legal authority to promulgate this proposed regulation, including (1) the most relevant law and/or regulation, including Code of Virginia citation and General Assembly chapter numbers, if applicable, and (2) promulgating entity, i.e., agency, board, or person. Describe the legal authority and the extent to which the authority is mandatory or discretionary.

§ 54.1-201.5 of the Code of Virginia (<http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+54.1-201>) states that the Board has the power and duty "To promulgate regulations in accordance with the Administrative Process Act (§ [2.2-4000](#) et seq.) necessary to assure continued competency, to prevent deceptive or misleading practices by practitioners and to effectively administer the regulatory system administered by the regulatory board. The regulations shall not be in conflict with the purposes and intent of this chapter or of Chapters 1 (§ [54.1-100](#) et seq.) and 3 (§ [54.1-300](#) et seq.) of this title.

Section 54.1-2301 B of the Code of Virginia (<http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+54.1-2301>) states that the Board shall examine operators and issue licenses. The licenses may be issued in specific operator classifications to attest to the competency of an operator to supervise and operate waterworks and wastewater works while protecting the public health, welfare and property and conserving and protecting the water resources of the Commonwealth.

The imperative form of the verb "shall" is used, making the Board's authority to regulate mandatory rather than discretionary.

Purpose

Please explain the need for the new or amended regulation. Describe the rationale or justification of the proposed regulatory action. Detail the specific reasons it is essential to protect the health, safety or welfare of citizens. Discuss the goals of the proposal and the problems the proposal is intended to solve.

The technology used to treat water and wastewater continues to evolve over time. For this reason, the Board decided that a thorough review of its existing regulations in light of current industry practice is necessary. That need is best illustrated by the college degrees and degree programs designed to prepare students to work in the environmental protection field. Many of these degree fields did not exist or were very new when the Board last conducted a general review of its regulations. The same is true of the facility classification standards in the current regulations. A review will identify any necessary modifications to reflect current practice and assure operation by competent individuals.

Substance

Please identify and explain the new substantive provisions, the substantive changes to existing sections, or both where appropriate. A more detailed discussion is required under the "All changes made in this regulatory action" section.

Section 18VAC160-20-10 is amended to clarify definitions which differentiate between waterworks and wastewater works licensees as well as expand on the definition of “structured training activity”. Two new definitions have been added for clarity.

Section 18VAC160-20-85 is repealed because the time period affecting restricted Class VI waterworks licenses has expired.

Section 18VAC160-20-90 is amended to include all specific qualifications for licensure of both waterworks and wastewater works operators. The amendments replace Roman numerals with Arabic numerals, specify the requirements for experience verification, expand education to include master’s degrees as well as related science degrees, modify the experience and experience substitution requirements, and eliminate redundancy in the language.

Section 18VAC160-20-95 is amended to emphasize that only non-classified facility operation experience is applicable to provisional licensure.

Section 18VAC160-20-106 is amended to specify that the regulant’s act of submitting to renew a license is the equivalent of an implied declaration that he/she has already fulfilled the Board’s continued professional education (CPE) requirement.

Section 18VAC160-20-109 is amended to include CPE for all regular and provisional-licensed facility operators. The amendments also specify that CPE must be appropriate to the license held and safety subjects may not count for more than half of the CPE requirement. The amendments extend the amount of time a regulant is required to maintain CPE completion records, eliminate the possibility of using the same CPE course for credit more than once during a license cycle, and provide CPE credit for course instructors.

Section 18VAC160-20-120 is amended to replace Roman numerals with Arabic numerals, and it also specifies the particular type of waterworks facilities which may be operated by a Class 1 waterworks licensee.

Section 18VAC160-20-130 is amended to replace Roman numerals with Arabic numerals, specify the design hydraulic capacity for Class 4 wastewater works, and also specify the particular type of wastewater works facilities which may be operated by a Class 1 wastewater works licensee.

Section 18VAC160-20-140 is amended to clarify the scope of the Board’s disciplinary authority over fraudulent attempts to obtain or renew a license.

Section 18VAC160-20-150 is amended to replace Roman numerals with Arabic numerals, removes self-assessment as a course completion requirement, and specifies that other assessment techniques must be similar to the aforementioned assessment techniques within the section.

Issues

Please identify the issues associated with the proposed regulatory action, including:

- 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions;*
 - 2) the primary advantages and disadvantages to the agency or the Commonwealth; and*
 - 3) other pertinent matters of interest to the regulated community, government officials, and the public.*
- If there are no disadvantages to the public or the Commonwealth, please indicate.*
-

1) The primary advantage to the public is the assurance that, as the relevant technology continues to advance, waterworks and wastewater works facilities in Virginia will continue to be operated by individuals whose education and experience includes the relevant changes in technology. These changes are best illustrated by the need for some \$1.4 billion in upgrades to approximately 120 wastewater facilities located in the Chesapeake Bay Watershed to meet EPA water quality improvement standards. Therefore, minimally competent individuals will continue to operate those facilities assuring the continued protection of the health and welfare of the citizens of the Commonwealth.

2) The primary advantage to the Commonwealth will be the continued successful regulation of competent and licensed individuals operating waterworks and wastewater works facilities throughout Virginia. No disadvantage has been identified.

3) The proposed amendments allow applicants to meet the licensing educational requirements with degrees in specific as well as related science fields pertinent to the waterworks and wastewater works industry. This may expand the scope of potential applicants while simultaneously ensuring competent applicants and licensees.

Changes made since the proposed stage

Please describe all changes made to the text of the proposed regulation since the publication of the proposed stage. For the Registrar’s office, please put an asterisk next to any substantive changes.

Section number	Requirement at proposed stage	What has changed	Rationale for change
18VAC160-20-10	None	Definition of “distance learning” was added.	Suggested by public comment and provides guidance as to what “distance learning” techniques are acceptable for CPE.
18VAC160-20-10	Definition of “structured training activity” was amended to allow “distance learning.”	Definition of “structured training activity” was amended to make clear that “distance learning” did not require “interaction with an instructor.”	Suggested by public comment. Many distance learning courses (DVD, video, online, etc.) do not provide interaction with an instructor. This amendment plus the addition of the “distance learning” definition address this concern.
18VAC160-20-10	None	Definition of “training credit or education credit” was added to clarify the meaning of the two terms.	Suggested by public comment in order to provide a specific meaning to the two terms used in the regulation language.
18VAC160-20-109 A	Required wastewater works operators to complete CPE every two	Amended to implement CPE requirements for wastewater works operators beginning on	Suggested by public comment. Specifically, the comment asked that

	years, but did not provide a specific starting date.	March 1, 2010.	the CPE requirement coincide with the next two-year license cycle (March 1, 2010 to February 29, 2012) for wastewater works operators. This will allow operators sufficient time to satisfy the CPE requirement without being financially burdensome.
--	------------------------------------------------------	----------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Public comment

Please summarize all comments received during the public comment period following the publication of the proposed stage, and provide the agency response. If no comment was received, please so indicate.

#	REGULATION #	SUMMARY OF COMMENT(S)
	COMMENTOR'S NAME	BOARD RESPONSE
1	18VAC160-20	Requests that the definition of “Training Credits (TC)” be added to the regulations. Suggests that “distance learning” be added to the definition of “structured training activity” and suggested the following language for the definition: “Structured training activity” means a formal educational process designed to permit a participant to learn a given subject or subjects, either through interaction with an instructor in a course, seminar, conference, or other performance-oriented format, or through distance learning.” Requests the definition of “distance learning” be added and state the following: means participation in a structured training activity that is performance-oriented, with or without the benefit of interaction with an instructor, the successful completion of which is supported by documentation as set forth in 18VAC160-20-109.D.1-4.” Suggests that Wastewater Works operators not be required to certify CPE until the February 2012 renewal cycle to allow sufficient time to obtain the necessary CPE credits without budget constraints.

#	REGULATION #	SUMMARY OF COMMENT(S)
	COMMENTOR'S NAME	BOARD RESPONSE
	R. Clarke Wallcraft; Frank W. Harkensen, Jr., for Virginia Association of Municipal Wastewater Agencies, Inc.; Charles P. Boepple, for Upper Occoquan Service Authority; Eric J. Rajaniemi, for City of Bedford; Uwe E. Weindel, for Frederick County Sanitation Authority; James C. M. Grandstaff, for Henrico County PDU;	<p>-The Board will add the definition of "Training Credit" as recommended.</p> <p>-The words, "distance learning", have already been added to the definition of "Structured Training Activity" with the regulation amendments implementing the OSSP program.</p> <p>-The Board will add a definition for "Distance Learning".</p> <p>-The Board will implement the change regarding wastewater CPE as suggested.</p>
2	18VAC160-20	Requests the Board define "distance learning" in the regulations. Also suggests that the definition of structured training activity be changed to include distance learning. Requests the Board define training credits in 18VAC160-21-10.
	Robert Murphy; Timothy L. Clemons; Val Foulds; Jean Andrews, for Augusta County Service Authority; Karen L. Pallansch, for Alexandria Sanitation Authority; Mardane McLemore, for HRSD	<p>-The Board will add a definition for "Distance Learning".</p> <p>-The words, "distance learning", have already been added to the definition of "Structured Training Activity" with the regulation amendments implementing the OSSP program.</p> <p>-The Board will add the definition of "Training Credit" as recommended.</p>
3	18VAC160-20	Suggests that a Bachelors degree Class III should need 1yr experience w/o substitutions and a class IV license, Class II 2yrs experience w/o substitutions and a class III license, and Class 1 3yrs experience w/o substitutions and a class II license..
	Jonathan Newcomb	No reason has been given to support the recommended change.
4	18VAC160-20-109	Suggests that a statement be added not requiring prior approval of CPE.
	Trey Fary	The Board finds no reason to add a statement specifying that prior approval of CPE is not required. The Board only approves Training Credit courses, and that process is outlined in the regulations. The

#	REGULATION #	SUMMARY OF COMMENT(S)
	COMMENTOR'S NAME	BOARD RESPONSE
		requirements for CPE are also specified in the regulations, and that does not include Board approval but must be "limited to content areas covered by the Board's examination."
5	18VAC160-20	Requests that it be easy for experienced surveyors/ engineers/ architects to teach classes for those few who are qualified to teach.
	Ty Brady	The Board's regulations only require that training credit course instructors "have demonstrated competence in the subject being taught, an understanding of the learning objective, knowledge of the learning process to be used, and a proven ability to communicate." The foregoing requirements are general; no specific qualifications for training credit instructors are required. The Board does not feel that this instructor requirement limits anyone who is qualified to teach training credit courses. No instructor requirement is specified for CPE courses as they do not require prior Board approval.
6	18VAC160-20	States that CPE should not be required unless it is made convenient for all municipalities such as online training or free onsite training.
	J. J. Perdue	Municipalities may instruct their staff on CPE topics as long as the course material is "limited to content areas covered by the Board's examination." "Distance learning" has been added to the Board's definition of "Structured Training Activity."
7	18VAC160-20	Suggests a provision that addresses dual certification should be included in the final regulation: allow a specified amount of the approved training a waterworks operator obtains to be used for wastewater recertification as well.
	Robert Leake	The Board will allow CPE for both licenses as long as it meets the existing CPE requirement that it is "limited to content

#	REGULATION #	SUMMARY OF COMMENT(S)
	COMMENTOR'S NAME	BOARD RESPONSE
		areas covered by the Board's examination." The licensee must be aware of which is required for each license that is held.
8	18VAC160-20	Suggests that a portion of the time spent as a mechanic at a water treatment plant should be able to be used toward the operator license.
	Joel Thompson, for Fairfax Water	The text of the regulation language is meant to exclude individuals whose <u>only</u> experience is in operation and maintenance of wastewater collection systems and water distribution systems, laboratory work, plant maintenance, and other nonoperating duties. If an individual's duties include operator tasks in addition to the tasks listed above, then the experience could qualify.
9	18VAC160-20-109	Some definition of "CPE Instructor" is necessary and should differentiate between an instructor who develops and presents classes in public forum and instructors who come into an organization from an outside vendor to make a presentation.
	Dennis R. Wanless	No instructor requirement is specified for CPE courses as they do not require prior Board approval. As long as CPE satisfies the Board's requirement of being "limited to content areas covered by the Board's examination", there is no need to differentiate between the instructors as suggested in the comment.
10	18VAC160-20	Excluding experience obtain in a labs, water distribution systems, wastewater collection systems, plant maintenance, and other areas that come into play in the job of an operator is an injustice.
	Susan Watson	The Board feels that 18VAC160-20-90 A.5 sufficiently identifies that experience limited to nonoperating duties shall not be counted as experience as an operator or as an operator-in-training. This requirement exists to ensure that applicants for licensure have the requisite experience to safely and

#	REGULATION #	SUMMARY OF COMMENT(S)
	COMMENTOR'S NAME	BOARD RESPONSE
		successfully operate water and wastewater systems. The text of the regulation language is meant to exclude individuals whose <u>only</u> experience is in operation and maintenance of wastewater collection systems and water distribution systems, laboratory work, plant maintenance, and other nonoperating duties. If an individual's duties include operator tasks in addition to the tasks listed above, then the experience could qualify.
1 1	18VAC160-20	A new CPE requirement will raise the costs of employing licensed operators.
	Gary Henley	Waterworks operators are currently required to complete CPE. Additionally, the Board feels that CPE is necessary to ensure that wastewater works operators are keeping up with the rapidly expanding technology in the wastewater field, and the only way to facilitate this is through CPE. Virginia is currently the only EPA Region III state that does not require CPE for its wastewater works operators. The Board feels that the cost of CPE is offset by allowing distance learning for both operators to satisfy the requirement.
1 2		Requests that "subject content" be defined and confined to "meeting the seven topics identified in the PSI examination content outline (page 3) documentation." Desires a procedure to allow the Association to determine CPE credit worthiness without undue burden or time constraints.
	Christopher W. Tabor, for Virginia Water Environment Association	The Board feels that the current requirement that CPE be "limited to content areas covered by the Board's examination" is sufficiently defined, and it is the licensee's responsibility to ensure that the CPE which he or she completes satisfies this requirement.

All changes made in this regulatory action

Please detail all changes that are being proposed and the consequences of the proposed changes. Detail new provisions and/or all changes to existing sections.

Current section number	Proposed new section number, if applicable	Current requirement	Proposed change and rationale
18VAC160-20-10		Definitions used in the regulation language	<p>“Board” is amended to include Onsite Sewage System Professionals.</p> <p>“Classification” is amended to clarify divisions within the two categories of waterworks and wastewater works. Class I Roman numeral is replaced with the Arabic equivalent.</p> <p>“Continuing Professional Education (CPE)” is amended to be applicable to all licensees.</p> <p>"Distance learning" is added to specify which forms of distance learning are acceptable to satisfy the CPE requirement.</p> <p>“Operate” is amended to correct grammar.</p> <p>“Structured training activity” is amended to include distance learning.</p> <p>"Training credit or education credit" is added in response to public comment to distinguish training credits from CPE as well as clarify the limits of these experience substitutes.</p>
18VAC160-20-85		Establishes requirements for restricted Class VI waterworks	This section is repealed because the Feb. 15 th , 2003, application deadline has passed.
18VAC160-20-90		Establishes the qualifications for licensure for waterworks and wastewater works operators	<p>The first paragraph becomes subsection A.</p> <p>Subsection A is amended to remove the language which mandates that the immediate supervisor must certify the applicant’s experience. The certification of an individual’s experience is addressed in subdivision A.2.</p> <p>Subdivision A.2 is amended to mandate that an applicant’s experience be gained under the direct supervision of a licensed operator. By only allowing experience under a</p>

			<p>licensed operator, the Board’s disciplinary authority extends to both the applicant and the certifying supervisor. The language amendment also offers the applicant an alternative should the direct supervisor be unavailable; a representative of the facility owner may then verify the applicant’s experience.</p> <p>Subdivision A.5 is amended to replace Roman numerals with Arabic numerals.</p> <p>Subdivisions B.1-3 are amended to replace Roman numerals with Arabic numerals, and the examination requirement is clarified to be specific to the license applied for: Class 6 license requires completion of Class 6 exam, Class 5 license requires completion of a Class 5 exam, and Class 4 license requires completion of a Class 4 exam.</p> <p>Subdivision B.4 is amended to replace Roman numerals with Arabic numerals. The exam requirement is clarified to indicate a “Class 3” exam specifically is required, master’s degrees are included to meet initial licensing requirements, the language specifies that degrees must be majors in the listed sciences, and the language is changed to allow related sciences. The criteria for licensure in subdivisions "a" and "b" are similar; the only difference is that subdivision "b" considers applicants who currently hold a Class 4 license. The situation is the same for subdivisions "c" and "d"; subdivision "d" also considers applicants who currently hold a Class 4 license. Both subdivisions, "b" and "d", are removed to eliminate redundancy because the requirements are the same as "a" and "c", respectively. The licensure requirements of subdivision B.4 are the same for all individuals regardless of any other licenses held.</p> <p>Subdivision B.5 is amended to replace Roman numerals with Arabic numerals and the experience requirement value is expressed in months instead of years. The exam requirement is clarified to indicate a “Class 2” exam specifically, master’s degrees are included in the eligible requirements, the language specifies that degrees must be majors in the listed sciences, and the language is changed to</p>
--	--	--	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

			<p>allow related sciences. The experience requirements without substitutions are changed so as to be consistent with the language contained in 18VAC160-20-90.C of the current regulations. The criteria for licensure in subdivisions "a", "b", and "c" are similar; the only difference is that subdivisions "b" and "c" consider applicants who currently hold a Class 4 license or a Class 3 license, respectively. Subdivisions "b" and "c" are removed to eliminate redundancy because the requirements are the same as subdivision "a". Under the proposed amendments, the licensure requirements of subdivision B.5 are the same for all individuals regardless of any other licenses held. The experience requirements under this subdivision are changed so as to be consistent with all other classifications of licenses. The change also reduces the required experience for those applying with a high school diploma as well as those applicants with no high school diploma.</p> <p>Subdivision B.6 is amended to replace Roman numerals with Arabic numerals. The exam requirement is clarified to indicate a "Class 1" exam specifically, master's degrees are included in the eligible requirements, the language specifies that degrees must be majors in the listed sciences, and the language is changed to allow related sciences. The experience requirements without substitutions are changed so as to be consistent with the language contained in 18VAC160-20-90.C of the current regulations.</p> <p>Subsection C is amended to replace Roman numerals with Arabic numerals.</p> <p>Subdivision C.2.b is amended to include related sciences as well as environmental science.</p> <p>Subdivision C.3 is amended to specify its limits on experience as pertinent to subsection B, and Roman numerals are replaced with Arabic numerals.</p>
18VAC160-20-95		Provisional licensure requirements	<p>Subdivision A.2 is amended to emphasize its application to nonclassified facilities only. The language is also changed so as to read more fluently and eliminate confusion. No</p>

			substance requirements are changed.
18VAC160-20-106		Renewal requirements	Subsection D is added to emphasize that a licensee's act of renewal is his/her affirmation of compliance with the CPE requirement of this chapter. Language requiring the licensee to send in an actual statement of compliance is eliminated in subsection C.
18VAC160-20-109		Continuing professional education requirements (CPE)	<p>Subsection A is amended to replace Roman numerals with Arabic numerals. The language is changed so as to require CPE for wastewater works operators which will assure that they have a means of becoming current on the emerging technology. The changes in technology are best illustrated by the need for an estimated \$1.4 billion in upgrades to approximately 120 wastewater facilities located in the Chesapeake Bay Watershed to meet EPA water quality improvement standards. CPE will ensure the continued successful operation of these facilities by minimally competent licensed individuals. Virginia is the only EPA Region III state to not have wastewater CPE requirements. The amended language also emphasizes that the section's requirements apply during each renewal cycle.</p> <p>Subsection B is amended to clarify that CPE subject matter must be appropriate to the license held, and safety subjects are declared to be valid toward no more than half of the CPE requirement per renewal cycle.</p> <p>Subsection E is amended to require that proof of CPE completion be maintained for two years instead of one year.</p> <p>Subsection F is amended to disallow the use of a CPE course more than once during a renewal cycle toward fulfilling the CPE requirement.</p> <p>Subsection H is added to allow CPE instructors to receive CPE credit toward their license renewal.</p> <p>Subsection I is added to allocate CPE credit to CPE instructors who initially develop or substantially update CPE courses.</p>
18VAC160-		Waterworks license	Subsections A, B, C, D, and E are amended

20-120		classification requirements	<p>to replace Roman numerals with Arabic numerals.</p> <p>Subsection F is amended to delineate specifically the types of waterworks facilities which may be operated by a Class I license holder.</p> <p>Subsection G is amended to correctly list terms specific to membrane technologies; the substance of the content remains unchanged.</p>
18VAC160-20-130		Wastewater works license classification requirements	<p>Subsection A is amended to replace Roman numerals with Arabic numerals. The amendments also include the correction of an error in the amount of the design hydraulic capacity from .4 MGD to .04 MGD.</p> <p>Subsection B is amended to replace Roman numerals with Arabic numerals.</p> <p>Subsection C is amended to replace Roman numerals with Arabic numerals.</p> <p>Subsection D is amended to replace Roman numerals with Arabic numerals. This subsection is also amended to delineate specifically the types of wastewater works facilities which may be operated by a Class I license holder.</p>
18VAC160-20-140		Board disciplinary criteria	<p>This section is amended to clarify the Board's scope of authority by including language specific to individuals fraudulently attempting to obtain or renew licenses.</p>
18VAC160-20-150		Training approval requirements	<p>This section is amended to replace Roman numerals with Arabic numerals.</p> <p>Subdivision B.5 is amended to eliminate self-assessment as a course completion requirement, and it specifies that other assessment techniques must be similar to those currently listed in this section.</p>

Regulatory flexibility analysis

Please describe the agency's analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum:

1) the establishment of less stringent compliance or reporting requirements; 2) the establishment of less stringent schedules or deadlines for compliance or reporting requirements; 3) the consolidation or simplification of compliance or reporting requirements; 4) the establishment of performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the proposed regulation.

1) The establishment of the least stringent requirements for the currently regulated professions is evidenced by the inclusion of master's degrees and *related* physical, biological, and chemical sciences as well as the inclusion of related environmental science degrees for initial licensure. The Board's definition of "structured training activity" is also amended to include distance learning which greatly expands licensees' options to complete CPE requirements for continued licensure. Additionally, CPE, which would become mandatory for wastewater works operators, can be completed in the same manner as waterworks operators who must complete CPE in accordance with the current regulation requirements. Four amendments were made in response to public comment before the Board adopted the final regulation. Specifically, one definition was further amended, two definitions were added and a beginning date for wastewater operator CPE was established. These amendments were made in response to public comment and added clarity to the regulation language.

2) The only compliance or reporting requirement is the continuing professional education (CPE) requirement for license renewal. A requirement for licensees to report compliance through documentation submitted at the time of renewal was replaced with a provision making the act of applying for renewal an affirmative statement of CPE compliance, thus making the renewal process less burdensome for the regulants and staff. The Board will periodically select, at random, a number of regulants and require submittal of CPE documentation to determine compliance. Those unable to provide documentation will be subject to the disciplinary provisions of the Board's regulations. Additionally, wastewater works operators would not be required to complete CPE until after February 28, 2010.

3) Same as #2 above.

4) All of the performance standards are focused on the protection of the public and the environment through the regulation of individuals rather than the regulation of their employers or their businesses.

5) The Board has no statutory authority to regulate businesses but has not lost sight of the fact that regulations affecting individuals do impact on businesses. The focus of the Board has remained on identifying the least intrusive provisions that will protect the public and the environment and also minimize adverse impact on businesses.

Family impact

Please assess the impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

No family impact has been identified.